

CERRO COPPER PRODUCTS

DIVISION OF CERRO-MARMON CORPORATION

OTHER ADDRESSEES - FOR INFORMATION

J. Johnson

A. Suhre

P. Tandler

INTERNAL MEMORANDUM

1104

153939

Form HQ-10

SHOW NAME, TITLE AND UNIT OF ADDRESSEE AND ADDRESSOR

TO: R. E. Conreaux, Refinery Superintendent

DATE: June 20, 1977

FROM: T. O'Connor, Project Engineer

SUBJECT: BILLET CAST - WATER CLARIFICATION SYSTEM AT COOLING TOWER

In order to up-date and verify their equipment, I requested from M. A. Altrup Company to visit and inspect one local installation of their unit.

It was arranged on June 15, 1977 for me to visit the St. Louis Metallizing Company installation.

The type of liquid clarified was grinding dust from a hard chrome grinding operation with dust being generated at 8 to 5 microns.

The unit being used was a single Hycone Model Z-2W Hydro Cyclone with 60 gallon tank and appropriate piping. The system operated at 20 gallons per minute. The liquid being used was 20:1 water soluble cutting fluid, milk white in color.

While operating the residue from grinding it turned the white solution to a dark gray color, at the entrance point of Hycone unit. Using an available filtration paper at this point it soon became dark in color. With the same type filtration paper at a point of discharge from the Hycone unit only minor buildup of residue developed.

The equipment, a 25 GPM unit, has been cleaning coolant solution very satisfactorily for the last six months without any breakdown or maintenance requirements.

I believe at this time Hycone should be given the opportunity to engineer a system for us by which we can determine feasibility of equipment and allow them to arrive at a firm quotation, which they have indicated will be lower than quotation of April 13, 1977, which was \$9,300.00.

Hycone has also stated that we may visit their plant and laboratory in Franklin, Tennessee, to answer any questions we have and also perform any test we wish while there.

I believe, after review of St. Louis Metallizing visit, Hycone can maintain the 90 percent water clarification guarantee as stated.

TO'C/bg

T. O'Connor

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